REMARKS

Claims 1-35, 37-39, and 42-44 are pending.

Claims 36 and 40-41 have been cancelled.

In the Office Action of October 17, 2008, claims 10 and 32 were rejected on the ground of nonstatutory obviousness-type double patenting; claims 28-35, 37, and 43 were rejected as being anticipated under 35 U.S.C. § 102(e) by Lumelsky (U.S. Patent No. 6,516,350); and claims 1-9, 11-27, 42, and 44 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lumelsky in view of Haroldson (U.S. Patent Application No. 2002/0029373).

Claim 10 was allowed, and claim 39 was indicated as containing allowable subject matter.

OBVIOUSNESS-TYPE DOUBLE PATENTING REJECTION

Claims 10 and 32 were rejected on the ground of nonstatutory obviousness-type double patenting over claim 1 of U.S. Patent No. 7,424,528 (hereinafter "'528 patent"). Claim 10 recites receiving configuration information for at least one streaming media server. However, claim 1 of the '528 patent does not recite receiving configuration information for at least one streaming media server. Claim 1 of the '528 patent recites identifying a mixed workload—however, that corresponds more to receiving workload information for a workload recited in claim 10, rather than receiving the configuration information for at least one streaming media server. Therefore, claim 10 is non-obvious over claim 1 of the '528 patent.

Independent claim 32 is also non-obvious over claim 1 of the '528 patent. Claim 32 recites a media profiler to receive a client access log collected over a period of time for a service provider's site and generate a workload profile for the service provider's site, where the workload profile includes, for a plurality of different points in time, identification of a number of concurrent client accesses, where the number of concurrent client accesses are categorized into corresponding encoding bit rates of streaming media files accessed thereby and are further sub-categorized into either memory or disk accesses. There is no hint in claim 1 of the '528 patent of the above subject matter.

In view of the foregoing, withdrawal of the obviousness-type double patenting rejection is respectfully requested.

REJECTION UNDER 35 U.S.C. § 102

It is respectfully submitted that claim 28 is clearly not anticipated by Lumelsky.

Claim 28 recites a method comprising:

- receiving workload information identifying an expected workload of client accesses of streaming media files from a server over a period of time; and

- determining a service demand profile for at least one server configuration under evaluation for evaluating a capacity of said at least one server configuration for supporting the expected workload, wherein said service demand profile comprises a plurality of pairs of information, each pair comprising an identification of a duration of time in said period of time and a corresponding computed resource cost of the at least one server configuration for serving the workload over the duration of time.

Lumelsky clearly does not disclose a service demand profile that comprises a plurality of pairs of information, where each pair comprises an identification of a duration of time in the period of time and a corresponding computed resource cost of the at least one server configuration for serving the workload over the duration of time.

With respect to this element of claim 28, the Office Action cited Fig. 9 and column 12, lines 2-7 of Lumelsky. 10/17/2008 Office Action at 7. Fig. 9 is a "graphical depiction of the capacity shaping mechanism" described in Lumelsky. Lumelsky, 7:49-51. As noted in column 12 of Lumelsky, a line 661 in Fig. 9 represents the number of request streams measured per pre-established time interval. The number of request streams measured per pre-established time interval does not constitute the pair of information that comprises an identification of a duration of time in the period of time and a **corresponding computed resource cost of the at least one server configuration for serving the workload over the duration of time**.

Column 12 of Lumelsky goes on to state that a dotted line 662 in Fig. 9 symbolizes the number of possible streams per "this interval." *Id.*, 12:4-5. The number of possible streams per time interval is not the same as a **corresponding computed resource cost of the at least one server configuration for serving the workload over the duration of time**, as recited in claim 28.

There is no other passage in Lumelsky that discloses the subject matter of claim 28. Therefore, claim 28 and its dependent claims are clearly allowable over Lumelsky.

Independent claim 32 recites a system comprising:

- a media profiler executable to receive a client access log collected over a period of time for a service provider's site and generate a workload profile for the service provider's site, wherein said workload profile comprises, for a plurality of different points in time, identification of a number of concurrent client accesses, wherein the number of concurrent client accesses are categorized into corresponding encoding bit rates of streaming media files accessed thereby and are further sub-categorized into either memory or disk accesses; and

- a capacity evaluator executable to receive the generated workload profile and evaluate at least one server configuration's capacity for supporting the site's workload.

It is clear that Lumelsky fails to disclose at least the following combination of elements: a workload profile that comprises, for a plurality of different points in time, identification of a number of concurrent client accesses, where the number of concurrent client accesses are **categorized** into **corresponding encoding bit rates of streaming media files accessed thereby and are further** sub-categorized **into either memory or disk accesses**. As purportedly disclosing this feature of claim 32, the Office Action cited Figs. 10 and 11 and column 12, lines 36-41, of Lumelsky. 10/17/2008 Office Action at 8. The cited column 12 passage of Lumelsky states that Fig. 10 illustrates streaming of MPEG-1 content and of MPEG-2 content. The cited passage also notes that "as a convenient means of measurement of the consumption of resources by a [*sic*] various classes of applications, the resources are characterized as storage s and service r(m, c, d) bins." However, there is no indication whatsoever that a number of concurrent client accesses are categorized into corresponding encoding bit rates of streaming media files accessed thereby and are further sub-categorized into either memory or disk accesses.

The Office Action had cited Fig. 9 of Lumelsky as disclosing the identification of a number of concurrent client accesses for a plurality of different points in time. Fig. 9 shows a number of streams per interval (661) or number of possible streams per interval (662). However, there is absolutely no indication whatsoever that the number of streams per interval or number of possible streams per interval depicted in Fig. 9 are categorized and further sub-categorized in the manner recited in claim 32.

19

Therefore, claim 32 and its dependent claims are clearly not anticipated by Lumelsky.

Claim 43 depends indirectly from claim 32 and is therefore allowable for at least the same reasons as claim 32. Moreover, claim 43 recites that the service demand profile comprises a plurality of pairs of information, each pair comprising identification of a duration of time in the period of time and a corresponding computed resource cost of the at least one server configuration for serving the workload over the duration of time. For additional reasons similar to those stated above with respect to claim 28, claim 43 is further allowable over Lumelsky.

REJECTION UNDER 35 U.S.C. § 103 OVER LUMELSKY IN VIEW OF HAROLDSON

It is respectfully submitted that the obviousness rejection of claim 1 over Lumelsky and Haroldson is erroneous. As conceded by the Office Action, Lumelsky fails to disclose configuration information for at least one streaming media server, where the configuration information comprises a single file benchmark and a unique file benchmark for the at least one streaming media server. 10/17/2008 Office Action at 10. Instead, the Office Action cited Haroldson as purportedly disclosing a single file benchmark and a unique file benchmark for at least one streaming media server, citing specifically to ¶ [0005] of Haroldson.

The cited passage of Haroldson refers to a technique for calculating a number of concurrent network connections associated with multicast streaming media. The cited passage also states that a chart can be generated that illustrates the number of network connections at specific points of time. Moreover, the passage refers to calculating concurrent connections for a particular server and/or a specific data stream. However, nowhere in this passage of Haroldson, or anywhere else in Haroldson, is there any hint given of configuration information that comprises a single file benchmark and a unique file benchmark for the at least one streaming media server. Calculating the number of network connections for a particular server and/or a specific data stream does not constitute a single file benchmark and a unique file benchmark, as recited in claim 1. As recited in claim 1, a single file benchmark measures the streaming media server capacity when all clients in a test workload are accessing a single file, while a unique file benchmark measures the streaming media server capacity when each client in the test workload is accessing a different file. Merely calculating the number of concurrent network connections,

as taught by Haroldson, does not constitute providing a single file benchmark and a unique file benchmark for at least one streaming media server.

Therefore, even if Lumelsky and Haroldson could be hypothetically combined, the hypothetical combination of the references fails to disclose or hint at all elements of claim 1.

Moreover, contrary to the assertion by the Examiner, Lumelsky fails to disclose or hint at the capacity planning tool evaluating, based on the configuration information, a capacity of the at least one streaming media server for supporting the workload, as recited in claim 1. Note that claim 1 further recites that the capacity planning tool evaluates, based on the configuration information that comprises a single file benchmark and a unique file benchmark for the at least one streaming media server, a capacity of the at least one streaming media server for supporting the workload. This subject matter of claim 1 is also not disclosed or hinted at by the hypothetical combination of Lumelsky and Haroldson.

Therefore, the obviousness rejection of claim 1 and its dependent claims is erroneous.

Independent claims 16 and 25 are similarly allowable over Lumelsky and Haroldson.

With respect to independent claim 44, the hypothetical combination of Lumelsky and Haroldson clearly fails to disclose or hint at:

- determining results of a **single file benchmark** for each of a plurality of **encoding bit rates** of a single file served by at least a first streaming media server configuration, wherein the result of the **single file benchmark** for a given **encoding bit rate** identifies the maximum number of concurrent streams of the single file that the at least a first streaming media server configuration can supply to a population of clients at the given **encoding bit rate**;

- **determining results of a** unique file benchmark **for each of said plurality of** encoding bit rates, **wherein the result of the** unique file benchmark **for a given** encoding bit rate **identifies the maximum number of concurrent streams of different files that the at least a first streaming media server configuration can supply to the population of clients at the given** encoding bit rate

Therefore, claim 44 is also non-obvious over Lumelsky and Haroldson.

CONCLUSION

Dependent claims are allowable for at least the same reasons as corresponding independent claims.

Allowance of all claims is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 08-2025 (60990043-1).

Respectfully submitted,

Date: _Jan 21, 2009_

Dan C. Hu
Registration No. 40,025
TROP, PRUNER & HU, P.C.
1616 South Voss Road, Suite 750
Houston, TX 77057-2631
Telephone: (713) 468-8880
Facsimile: (713) 468-8883